supply water supplied into the nuclear reactor is limited up to 0.10 ppb and preferably up to

0.04 ppb as an upper limit value, and more preferably limited up to zero as closely as

possible. In such a case, a nickel concentration in the reactor water is maintained so as to be

less than 0.2 ppb.--

Please replace the paragraph at page 7, lines 12-24, with the following text:

--According to the present invention, introduction of natural zinc into the nuclear

reactor water to limit the zinc ion concentration value to up to 5 ppb, as claimed in Claim 4,

makes it possible to cause an amount of $ZnFe_2O_4$ in a place other than the surface of coated

fuel pipes to become null. It is also possible to inhibit generation of ZnO on the surface of

the coated fuel pipes as well as generation of Zn-65 due to $ZnFe_2O_4$ generated. When the iron

concentration value of supply water is 0.04 ppb, it corresponds to 1/10 of iron amount of

supply water in a domestic BWR plant and 1/50 of that in a BWR plant in many foreign

countries. In this case, an amount of Zn-65 generated on the surface of coated fuel pipes

comes merely to the same extent as in the case where expensive zinc, from which Zn-64 has

been removed, is used in the foreign BWR plants, even when natural zinc is used.--

Please replace the paragraph at page 8, line 25, through page 9, line 7, with the

following text:

--A remarkable reducibility of an amount of nickel makes an amount of iron generated

at least twice as much as an amount of nickel due to existence of ferrite, which is generated

through corrosion of stainless steel in the reactor, even when iron concentration of the supply

water decreases to become null. In such a case, it is preferable to reduce the iron

concentration of the supply water as lower as possible. An iron removing device as claimed

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in any one of Claims 8 to 11 is required to make the iron concentration of the supply water null. The condition for making an amount of iron generated at least twice as much as an amount of nickel may exist in the intermediate portion between 0.04 ppb as the existing value and zero, depending an extent of reduction in an amount of nickel generated.--

Please replace the paragraph at page 9, lines 20-28, with the following text:

--Reduction in an amount of cobalt generated will suffice in order to reduce a clad Co-60 in the reactor water under conditions in which an amount of iron carried is minimized. Under the present circumstances, the Co-base alloys for the turbine blade and the large-diameter valve make up 30% and 40% of the source of cobalt, respectively. Therefore, when the Stellite as the cobalt base alloy is changed to nickel base alloy as claimed in claim 13, it becomes possible to reduce an amount of cobalt generated to one fourth thereof in the present circumstances.--

Please replace the paragraph at page 13, lines 5-16, with the following text:

--In the RWCU system 8, carbon steel is used for system pipes and shells of the RWCU heat exchanger 9. Stainless steel is used for heat exchange tubes of the RWCU heat exchanger 9. Corrosion velocity of the carbon steel during the operation of the plant is twice as much as the stainless steel at the most and wetted area of the carbon steel is less than 5% of the stainless steel. Corroded iron forms $NiFe_2O_4$, like the stainless steel. Amounts of iron and nickel generated in the existing nuclear reactor are shown in the form of concentration value converted into the supply water after achievement of the equilibrium core. Amounts of iron and nickel generated are $12.6t^{-0.5}$ppb [t:EFPH (Effective Full Power Hour)] and $(3.4t^{-0.5}+0.04)$ ppb (t:EFPH), respectively. Here, "0.04" is a contribution to

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generation from the fuel springs of Ni-base alloy.--

Please replace the paragraph at page 14, lines 6-9, with the following text:

--In the existing system, the iron concentration of the supply water of about 0.04 ppb is maintained. In the existing system, the contribution rates of the first, second and third routes are 50%, 30% and 20%, respectively.--

Please replace two paragraphs at page 14, line 20, through page 15, line 3, with the following text:

--Accordingly, the total amount of iron and nickel in the form of concentration value converted into the supply water can be expressed as follows:

Total amount of iron generated in the from of concentration value converted into the supply water

$= 0.04 + 12.6t^{-0.5}$ (t: EFPH) . . . . (3)

Total amount of nickel generated in the form of concentration value converted into the supply water

$= 0.04 + 12.6t^{-0.5} + 3.4 t^{-0.5}$ (t: EFPH) . . . . (4)

The first term on the right-hand side in the formula (3) is an amount of iron carried from the supply water system 1 into the nuclear reactor 2 and the second term thereof is an amount of iron generated mainly from the stainless steel in the reactor.--